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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,853	03/30/2004	Susanne A. Paul	SIL.P0076	3441
30163	7590	11/02/2005	EXAMINER	
JOHNSON & ASSOCIATES PO BOX 90698 AUSTIN, TX 78709-0698			SHINGLETON, MICHAEL B	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/812,853	PAUL ET AL.	
	Examiner	Art Unit	
	Michael B. Shingleton	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08-09-2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-66 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 47-66 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____

DETAILED ACTION

Applicant states that "An IDS will be following this amendment" in the response dated 8-9-2005. However, no response filed after the 8-9-2005 response is in the file at the time of this Office Action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 47-49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al. 5,994,963 (Kawai).

Figure 2 and the relevant text of Kawai disclose a mobile (portable) telephone system that employs a transceiver with a power amplifier 15 that is coupled between the transceiver and the antenna. Note that while the power amplifier 15 is recited by Kawai as part of the transmitting section just like that of applicant's invention, another reasonable interpretation is that this power amplifier can also be considered to be "outside" the transceiver because the output of the SAW filter 14 can be consider the output of the transmitter section of the transceiver. Figures 7-9 and the relevant text of Kawai discloses a power amplifier arrangement that solves the problems of power amplifier arrangements that are recited in the background of the invention section of the Kawai patent. The power amplifier of Kawai includes two switching devices like elements 45 and 46 (Note that transistors are well known to be considered switching devices.), a voltage potential is applied across these transistors as is clearly illustrated and an inductor like 67 is coupled between these two switching devices. Kawai discloses the claimed invention except Kawai does not specifically recite that the power amplifier of Figures 7-9 can be used instead of the element 15 power amplifier of the mobile telephone system. However, it is clear from Kawai that the power amplifiers of Figures 7-9 is an equivalent structure known in the art. Note that the alternative embodiment of Figure 5 of Kawai can be used in a portable telephone set. Therefore, because these two power amplifier structures were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute any one of the power amplifier of Figures 7-9 for the prior art power amplifier 15 of Kawai.

It is also noted that the portable telephone arrangement made obvious above is not called a "cellular" telephone by Kawai. However, portable telephones denote a large group of telephone structures that include "cellular" telephones as part of this group. In any case portable cellular telephones are conventionally known prior art structures. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the telephone arrangement of Kawai as a or in a cellular telephone arrangement because as the Kawai reference is silent on the exact type of portable telephone employed one of ordinary skill in the art would have been motivated to use any art-recognized equivalent type of portable telephone for the portable telephone arrangement of Kawai such as the conventional cellular telephone.

Claims like claim 48 recites that "the first and second switching devices are driven by signals that repeatedly turn the devices on and off". This is true in the combination made obvious above for when the power that drives these transistors 45 and 46 is turned on and off transistors 45 and 46 are repeatedly turned on and off. Note that the device is a portable device and it would not make any sense to have power constantly applied to the power amplifier when the power is turned off. Furthermore, this makes the first and second switching devices of Kawai cycled on during the same time and cycled off during the same time as set forth in claims like claim 49. To "drive" means "to set or keep in motion or operation (-machinery by electricity)" (See page 384 of Webster's Ninth New Collegiate Dictionary copyright 1991). The battery power source of a portable telephone "drives" this machinery by electricity. From page 1096 of the same dictionary recites "signal" as "something that incites to action" and thus the power supply signals of the combination made obvious above is something that incites (put in motion, spurs on, causes to move into action) to action, i.e. the signals causes the device to turned on (action).

Double Patenting

Note that both the 10/812,853 and the 10/813,566 both have the same effective filing date since these two applications have the same parent application 09/660,123 and thus only a one-way determination of obviousness is needed in resolving the issue of double patenting.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37, CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 47-66 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 47-56 of copending Application No. 10/812,566 in view of Vernon 6,188,274 (Vernon).

Claims 47-49 of the '566 application fails to recite the use of the claimed power amplifier in a cellular telephone transceiver and antenna arrangement. However, the claimed power amplifier is clearly meant to be a component of a larger system and the use of a conventional power amplifier in a cellular telephone transceiver and antenna arrangement is a common place. Note column 2 around line 50 of Vernon that states that RF power amplifiers find common usage in cellular telephones that includes an antenna and a transceiver. Vernon is silent on the details of the power amplifier thus one of ordinary skill in the art would have been motivated to use any art-recognized equivalent power amplifier for the power amplifier of Vernon. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the power amplifier arrangement as claimed in claims 47-49 of the '566 application in a cellular telephone transceiver and antenna arrangement because as the claimed invention of the '566 application is silent on the exact use of the amplifier component one of ordinary skill in the art would have been motivated to use the power amplifier in any conventional system that employs a generic power amplifier such as the conventional cellular telephone transceiver and antenna arrangement of Vernon. Adding limitations to a well-known use for a power amplifier does not provide for a patentable distinction since the combination (power amplifier and use for the power amplifier) relies on the details of the power combination for patentability as evidenced by Vernon (Also see MPEP 806.05(c)). Note that the voltage between the voltage supply node and ground is a "voltage differential". Also note that with the first and second transistors being on with the second and third transistors being off that this is driving the first and second transistors out of phase with the third and fourth transistors and thus the limitations of claim 64 fails to present a patentable distinction over that of the '566 application. As to claims 65 and 66 here applicant presents all possibilities for the CMOS arrangement of the first and second transistors. The claims of the '566 application are unclear which transistor is p and which is n, however, one of these claims 65 or 66 would apply with the other being an obvious variant. In other words if the CMOS ~~was~~ arrangement had the first transistor being n and the second being p the other CMOS arrangement of ~~having~~ the first transistor being p and the second being n ^{being}

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would be an art recognized equivalent structure although the supply potentials would have to be reversed in order for the device to function proper which would be within routine skill. This is akin to forming the same circuit with npn's as compared to pnp's. It would be within the level of routine skill to select the proper biasing points etc..

This is a provisional obviousness-type double patenting rejection.

Claims 47-66 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 47-80 of copending Application No. 10/812,858 in view of Vernon 6,188,274 (Vernon).

Claims of the '858 application fails to recite the use of the claimed power amplifier in a cellular telephone transceiver and antenna arrangement. However, the claimed method of the '858 application is clearly directed to a power amplifier structure (You cannot practice the method without the structure defined therein.) and a power amplifier structure is clearly meant to be provided in a component of a larger system and the use of a conventional power amplifier in a cellular telephone transceiver and antenna arrangement is a common place. Note column 2 around line 50 of Vernon that states that RF power amplifiers find common usage in cellular telephones that includes an antenna and a transceiver. Vernon is silent on the details of the power amplifier thus one of ordinary skill in the art would have been motivated to use any art-recognized equivalent power amplifier for the power amplifier of Vernon. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the power amplifier arrangement as claimed in the claims of the '853 application in a cellular telephone transceiver and antenna arrangement because as the claimed invention of the '858 application is silent on the exact use of the amplifier component one of ordinary skill in the art would have been motivated to use the power amplifier in any conventional system that employs a generic power amplifier such as the conventional cellular telephone transceiver and antenna arrangement of Vernon. Adding limitations/steps to a well-known use for a power amplifier does not provide for a patentable distinction since the combination (power amplifier and use for the power amplifier) relies on the details of the combination for patentability as evidenced by Vernon (Also see MPEP 806.05(c)). Note that the voltage between the voltage supply node and ground is a "voltage differential". Also note that with the first and second transistors being on with the second and third transistors being off that this is driving the first and second transistors out of phase with the third and fourth transistors. As to claims 65 and 66 here applicant presents all possibilities for the CMOS arrangement of the first and second transistors. This is presented in claims 79 and 80 of the '858 application.

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Claims 47-49 and 51-55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-58 of U.S. Patent No. 6,549,071 in view of Vernon 6,188,274 (Vernon).

Claims 1-58 of the '274 Patent fails to recite the use of the claimed power amplifier in a cellular telephone transceiver and antenna arrangement. However, the claimed power amplifier is clearly meant to be a component of a larger system and the use of a conventional power amplifier in a cellular telephone transceiver and antenna arrangement is a common place. Note column 2 around line 50 of Vernon that states that RF power amplifiers find common usage in cellular telephones that includes an antenna and a transceiver. Vernon is silent on the details of the power amplifier thus one of ordinary skill in the art would have been motivated to use any art-recognized equivalent power amplifier for the power amplifier of Vernon. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the power amplifier arrangement as claimed in claims 1-58 of the '274 Patent in a cellular telephone transceiver and antenna arrangement because as the claimed invention of the '566 patent is silent on the exact use of the amplifier component one of ordinary skill in the art would have been motivated to use the power amplifier in any conventional system that employs a generic power amplifier such as the conventional cellular telephone transceiver and antenna arrangement of Vernon. Adding limitations to a well-known use for a power amplifier does not provide for a patentable distinction since the combination (power amplifier and use for the power amplifier) relies on the details of the combination for patentability as evidenced by Vernon (Also see MPEP 806.05(c)). Note that the voltage between the voltage supply node and ground is a "voltage differential".

This is a provisional obviousness-type double patenting rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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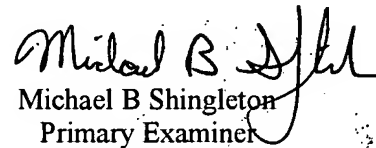
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is (571) 272-1770.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal, can be reached on (571)272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 and after July 15, 2005 the fax number will be 571-273-8300. Note that old fax number (703-872-9306) will be service until September 15, 2005.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MBS

October 22, 2005


Michael B Shingleton
Primary Examiner
Group Art Unit 2817